Patent Plaques

# JP11226404A: CATALYST FOR PURIFICATION OF EXHAUST GAS

View Images (1 pages)



Country: **JP** Japan

Inventor(s): **HACHISUGA ICHIRO**
**IKEDA YASUO**

Applicant(s): **TOYOTA MOTOR CORP**
**DAIICHI KIGENSOKAGAKU KOGYO CO LTD**



Issued/Filed Dates: **Aug. 24, 1999** / Sept. 17, 1998

Application Number: **JP1998000263180**

IPC Class: **B01J 023/58;** B01J 023/63; F01N 003/10; F01N 003/24; F01N 003/28;

Priority Number(s): Dec. 8, 1997 **JP1997000337359**

Abstract: **Problem to be solved**: To make sufficiently exhibit the steam reforming activity of Rh while maintaining high oxidation performance of Pt, and to suppress poisoning of NOx occlusion material with sulfur.
**Solution**: This catalyst consists of a first powder 3 obtd. by supporting at least Pt on a first carrier 30 and a second powder obtd. by supporting at least Rh on a second carrier 40 in a mixed state, and a NOx occlusion material is deposited on the first carrier 30. As for the second carrier 40, zirconia stabilized with at least one of alkaline earth metals and rare earth elements is used. Since the second carrier 40 is controlled to be basic by the alkaline earth metals or rare earth elements, it has excellent absorptivity of steam (H2O), and therefore, steam reforming reaction by Rh sufficiently proceeds. Therefore, the produced hydrogen largely contributes to the reduction of NOx and to prevention of positioning of the NOx occlusion material with sulfur.


Foreign References: **none**

(No patents reference this one)